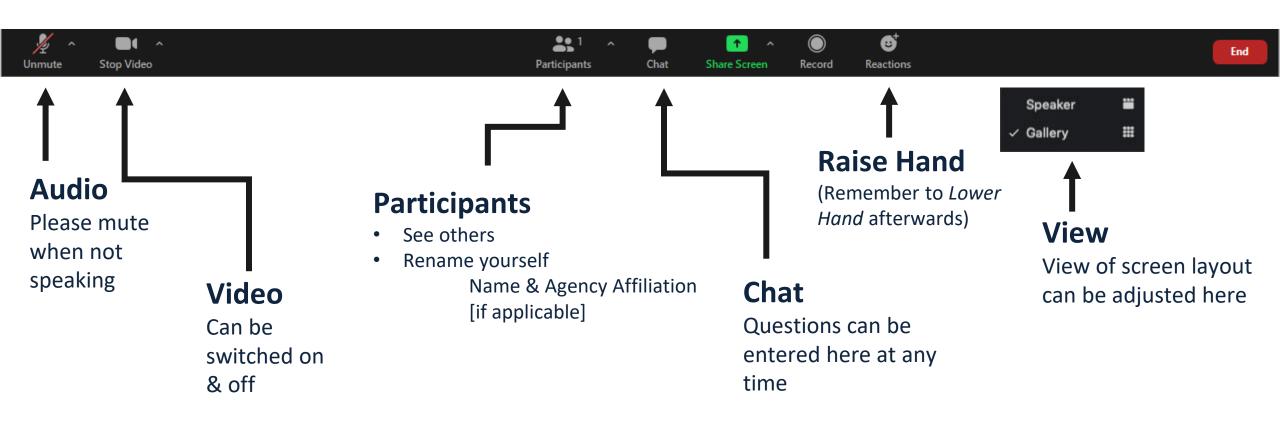


ZOOM TOOLS



AGENDA

Welcoming Remarks – Doug Krauss

Project Overview and Latest Developments

Options & Features: Sites 1, 2 & 3

Community Discussion: Additional

Considerations

Summary and Next Steps

		Desir	ed Outc	omes		
Concerned about emergency access for all projects	Interested in the living shoreline plans	Maintain a clean beach and improve operations within the project	Excited to see the plans for the living shoreline concept	Help identify and address any traffic or transportation concerns	Ensure there is public access along the coastal zones	Complete streets and connection of the strand walkway between Hermosa end Manhattan Beach
Provide assistance for the environmental adaptation efforts	Want to see project components address water quality issues (i.e., trash collection and runoff capture)	Engage as many people as possible during the outreach phase of the project	Integrate the City's Storm Drein Master Plan into the project	Community Engagement Beet Practices for the Using Shoretine aspect - Identified by the City of LA	Visual and conceptual graphics help to convey the message and communicate with the public	What information does the City need to make mobility improvements or living shoreline changes along Hermosa
Improvements to infrastructure to protect from rising water levels	improvements to blke infrastructure, access and circulation	Better circulation for all types of mobility	Balance different mobility usages and access	Respect neighbors in the area	Very interested in the living shoreline concept as a way to combat SLR	Access to the beach is critical for a number of agencies and reasons
Appreciate the multi- disciplinary approach for the project - especially on the engineerial side	Went to see an improvement on mobility and access for each site	Opportunity to think about the long term maintenance of the project	Leverage Urban Tides program when conducting outreach	Visuals are important to communicate with the community - beach walks, imagery of king tides, etc.		

Project Q&A

Why are these three sites the main areas of concern?

Capitol Improvement Projects identified by the City for areas in need mobility and climate adaptation concerns

Will there be more public facing meetings moving forward?

Yes, there will be broader public workshops that will cover the same topics

How law enforcement ties into the project sites and how beach access will impact law enforcement duties?

Patrols access all areas of the beach when checking fishermen

As long as enforcement is able to walk along the beach they should be good

Best way to get the word out?

Leverage different stakeholders networks

Who is going to maintain, monitor, etc., aspects of the project?

No matter what is done, there will always be some segments of the population who disagree

Site One - Hermosa Ave between Herondo St and 4th St



One path is maintained by the DPW and would be a good group to involve

traffic impact from increased ADUs in the area?

SITE 3 - FEEDBACK (1 of 2)

HERMOSA AVE and THE STRAND / 35TH STREET

Follow Caltrans design standards for bicycle transportation (ie. curvature, slope, etc.) - turns may be too sharp on the proposed design.

Of greater concern may be cyclists moving downgrade at speed into an area that is heavily trafficked by pedestrians.

At the bike "Y" at the north end there needs to be some sort of bike-bike traffic control.

There needs to be dedicated lanes/traffic flow someone if a cyclist on the street bike path wants to go to the strand bike path.

Consider the area that will be blocked off by the bike path and utilize that in a smart way to minimize the negative perception of losing beach space.

Poured concrete vs piered approach - SLR hazards can become more relevant - Commission sees a design that would be adaptive would be more likely to be considered versus a concrete structure.

SITE 3 - FEEDBACK (2 of 2)

HERMOSA AVE and THE STRAND / 35TH STREET

Direct walkers away from the pike path connection to pedestrian connection at 35th and Hermosa Ave.

Need to consider the fact that this is a highly trafficked crossing and there needs to be a dedicated crossing for pedestrians and foot traffic to the beach (as well as emergency services).

The stairs are challenging for people walking and bikers - it seems like a no brainer to extend the ramp and continue the bike lane.

Increasing accessibility to coastal areas is what Sea Grant supports and any ways to incorporate access to the beach within the design would be favorable.

Biggest concern is intermix of bikes and pedestrian.

Carrying bikes up the stairs can be a big challenge so in favor of the ramp - there is also no wheelchair access so that is a must for this project.

Infiltration in the ramp area would be a great to incorporate into the design.







OVERARCHING GOALS

Preserve public access to coastal resources

Preserve beach areas and visual resources

Preserve recreation economy and culture

Protect structures and visitor serving businesses

Improve water quality and provide enhanced environmental benefits

WHAT WILL THIS PROJECT ADDRESS?

Increasing community resilience to coastal flooding impacts.



Flooding Caused By Rain Event.



Flooding Caused By Inundation From Seawater



Flooding Caused By Seawater Blocking Stormdrains.

What are the hazards associated with sea level rise for Hermosa Beach?





Flooding caused by rain event. Storm drain networks are overwhelmed.





Infiltration: Curb openings permeable paving lanes



Infiltration: Permeable sidewalk































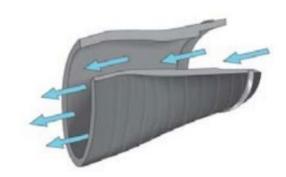
Flooding caused by inundation from seawater. Can be driven by storm events.



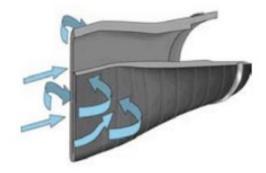


Flooding Caused By Seawater Blocking Stormdrains.





Forward Flow valve opens easily



Backflow valve seals tightly

SITE 1 HERMOSA AVE /HERONDO ST to 4TH STREET





Flooding Drainage Inlet at SLR 6.7 ft

Non-Flooding Drainage Inlet

Existing Condition

Minor flooding occurs at Hermosa Ave. at 2nd St, due to undersized pipes. The flooding depth varies from 0.5ft to 1.6 ft along the storm drain line.

With Sea Level Rise

The flooding depths under +3.3ft SLR increase up to 0.3ft only limited at the upstream of the storm drain line at Hermosa Ave and 2nd St.

The flooding depths under +6.7ft SLR increase up to 2.6 ft, and along the entire storm drain line along Hermosa Ave.

The flooding depths under +16.4ft SLR all increase more than 5ft, and up to 12.3ft at almost all nodes within the storm drain lines.

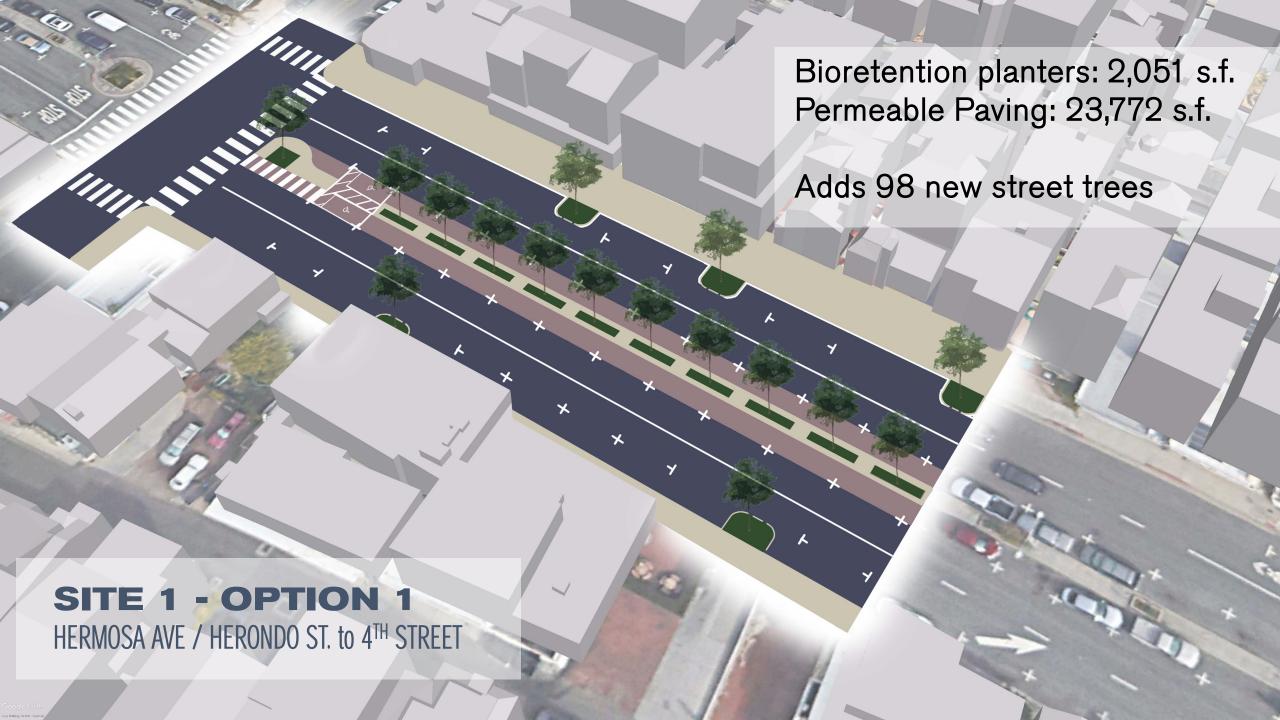


Predicted street level flood boundary based on the Coastal Storm Modeling System (CoSMoS) Version 3.0, Phase 2 (USGS) model and is for planning purposes only.

SITE 1 - OPTION 1

HERMOSA AVE / HERONDO ST. to 4TH STREET





Bioretention PlanterWith Infiltration

Provides volume reduction

Water quality treatment

Infiltration

Pre-treatment for other systems



Permeable Pavement

Provides volume reduction

Infiltration

Locate at least 10' from buildings

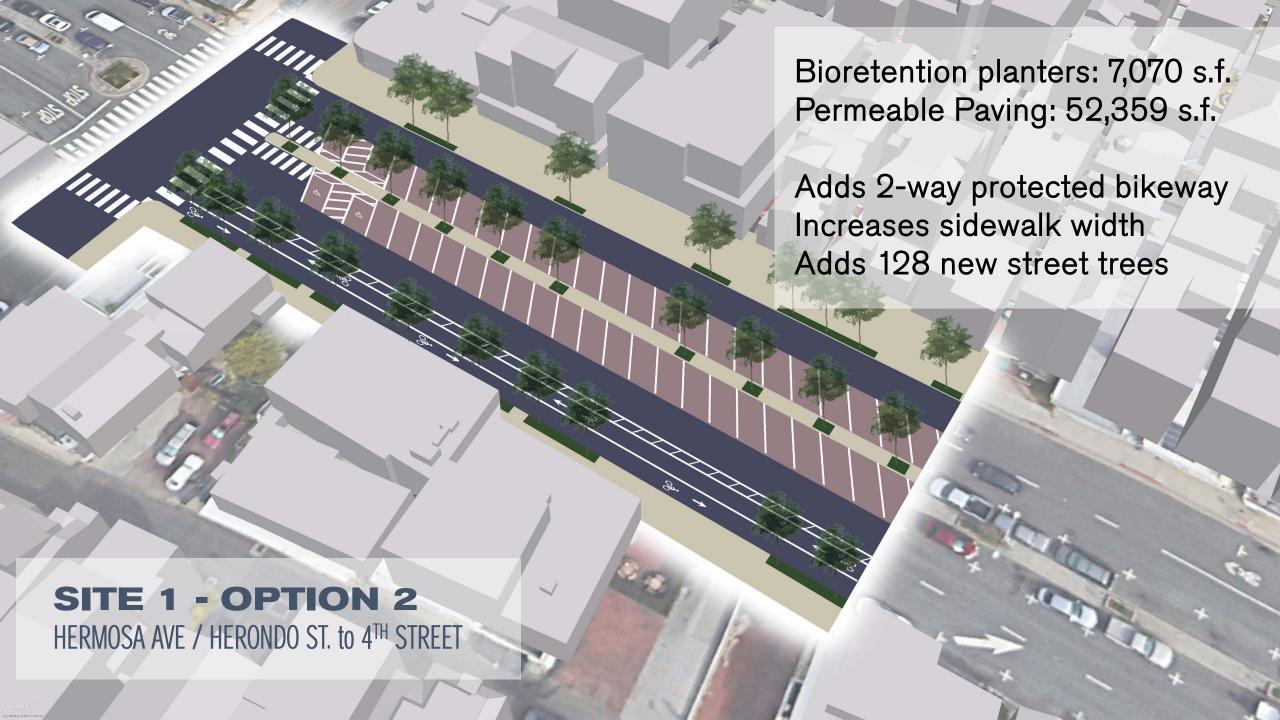
Volume reduction limited to smaller tributary area



SITE 1 - OPTION 2

HERMOSA AVE / HERONDO ST. to 4TH STREET





Additional considerations

SITE 2 26TH & HERMOSA AVE



Non-Flooding Drainage Inlet

Existing Condition

Minor flooding occurs upstream of 26th St- Hermosa Ave at 28th St and 27th.

The flooding depth varies from 0.2ft to 2.4ft along the storm drain line.

With Sea Level Rise

No impact to flood depth under +3.3 ft and +6.7 ft SLR. Compared to existing condition, the flooding depths under +16.4ft SLR will increase up to 1.3 ft along the storm drain line at Hermosa Ave at 26th St to 28th St.



Predicted street level flood boundary based on the Coastal Storm Modeling System (CoSMoS) Version 3.0, Phase 2 (USGS) model and is for planning purposes only.

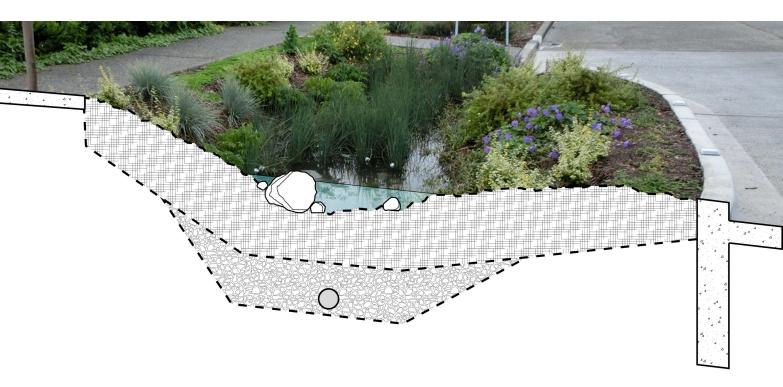
Bioretention Basins

Provides volume reduction

Water quality treatment

Infiltration

Large space requirements



Underground Infiltration

Provides volume reduction

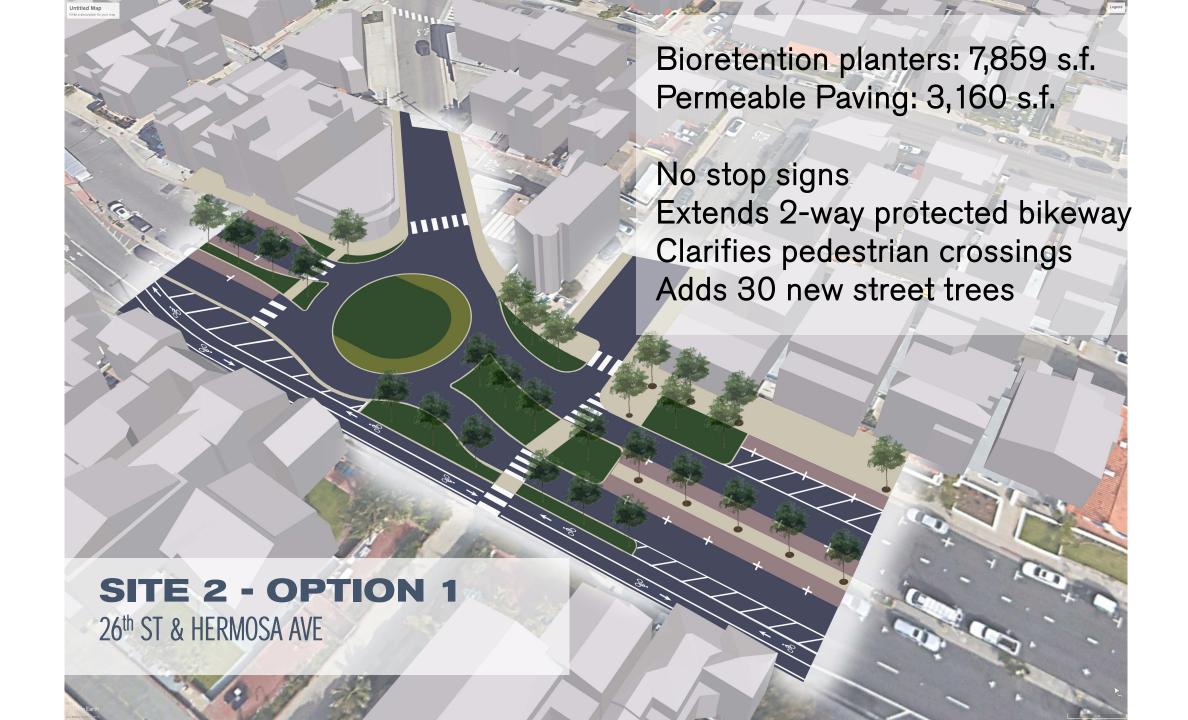
Infiltration

High Volume Capacity

Not seen above ground

Utility conflicts







Additional considerations

SITE 3 35TH ST & HERM OSA AVE



Non-Flooding Drainage Inlet

Existing Condition

Minor flooding occurs at Hermosa Ave. at 35th St.

The flooding depth varies from 0.8ft to 1.1 ft along the storm drain line.

With Sea Level Rise

No impact to flood depth under +3.3 ft and +6.7 ft SLR.

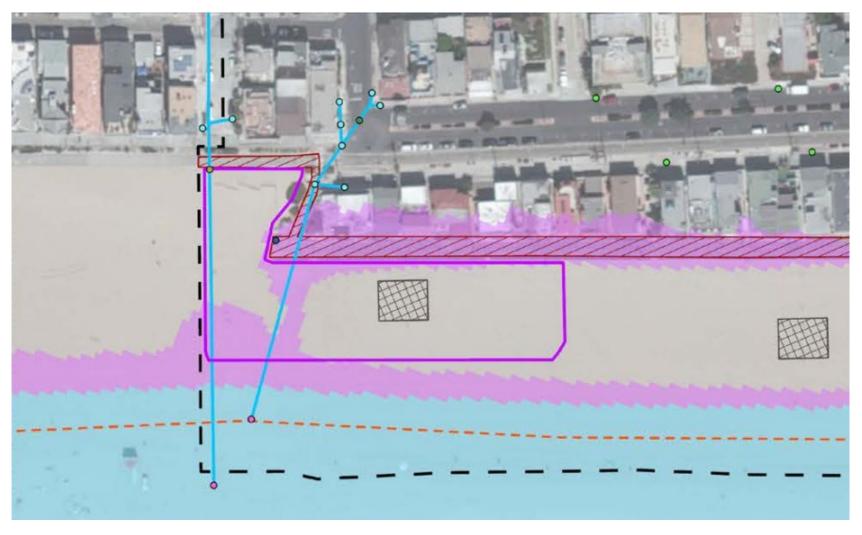
Compared to existing condition, the flooding depths under +16.4ft SLR will increase up to 2.0 ft along the storm drain line at 35th St.



Predicted street level flood boundary based on the Coastal Storm Modeling System (CoSMoS) Version 3.0, Phase 2 (USGS) model and is for planning purposes only.

SITE 3 – Flood vulnerability

HERMOSA AVE and THE STRAND / 35TH STREET



Projected tidal inundation, storm flooding, and shoreline position with 6.7 ft SLR.

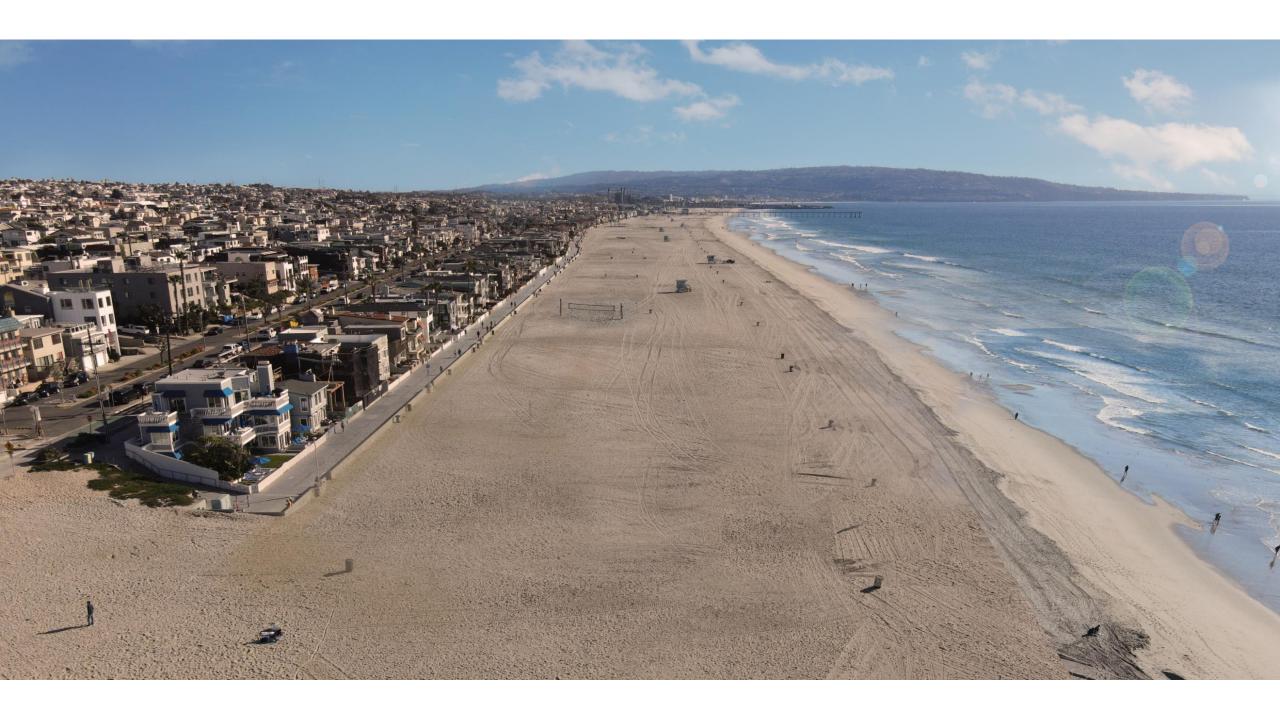


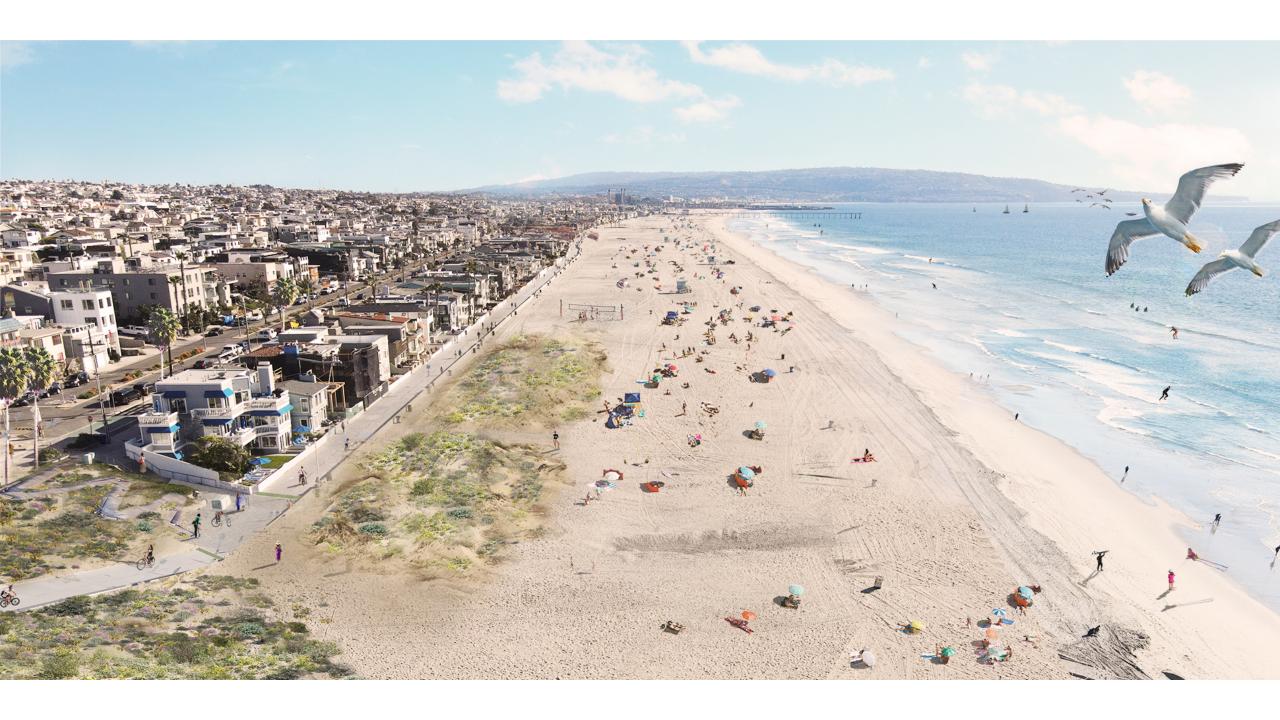
SITE 3 35TH ST & HERMOSA AVE

- 1. Extend pipe and outfall seaward.
- 2. Pre-build dune mounds and seed to artificially build topography.
- 3. Install symbolic fencing.



I 0' I 30' I 60'





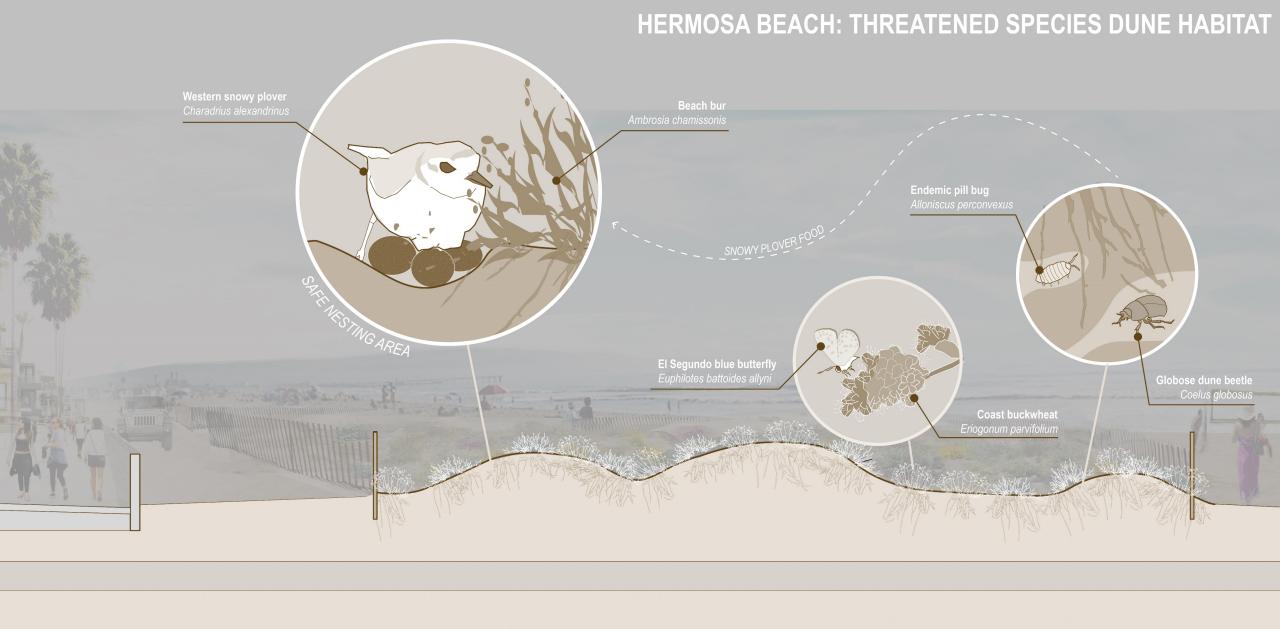




THE STRAND

EMERGENCY ACCESS

PROPOSED DUNE RESTORATION





SITE 3 35TH ST & HERMOSA AVE

OPTION 1 - MOBILITY HUB



PLANTING MATERIALS - Mobility hub



Metrosideros excelsa New Zealand Christmas tree



Westringia 'Smokey' Coast rosemary



Armeria maritima Sea thrift



Pinus torreyana Torrey pine



Salvia 'Pozo Blue' Gray musk sage



Bulbine frutescens 'Compact Yellow'
Yellow bulbine



Leptosyne (Coreopsis) gigantea Giant coreopsis



Dianella revoluta 'Little Rev' Little Rev flax lily



Carex glauca Blue sedge



Cistus salvifolia 'Prostratus' Sageleaf rockrose



Rosemarinus officinalis 'prostrata' Prostrate creeping rosemary



Erigeron glaucus Seaside daisy



Erigonum fasciculatum 'Warriner Lytle' California buckwheat



Achillea millefolium 'Island Pink' Pink yarrow



Dudleya pulverulenta Chalk dudleya

SITE 3 35TH ST & HERMOSA AVE

OPTION 2 - NATURAL TRAIL



PLANTING MATERIALS - Coastal dune



Abronia maritima Red sand verbena



Calystegia soldanella Beach morning glory



Encelia californica California sunflower



Ambrosia chamissonis Beach bur



Camissoniopsis cheiranthifolia Beach evening primrose



Ericameria ericoides Mock heather



Atriplex leucophylla
Beach saltbush



Eschscholzia californica California poppy (coastal)



Erigonum parvifolium Seacliff buckwheat



Lupinus chamissonis Silver lupine



Distichlis spicata Saltgrass



Isocoma meniesii Coast goldenbush



Abronia umbellata Pink sand verbena



Calystegia macrostegia Coast morning glory



Leptosyne (Coreopsis) gigantea Giant coreopsis









"ADA access to beach is a must"

"We need a water fountain with a dog bowl" "I like the idea of protected bike lanes and wider sidewalks" "There are accidents with traffic circles all the time"

"Emergency access must be preserved"

"There is no problem here – keep it as it is"

"The traffic circle is the smartest option"

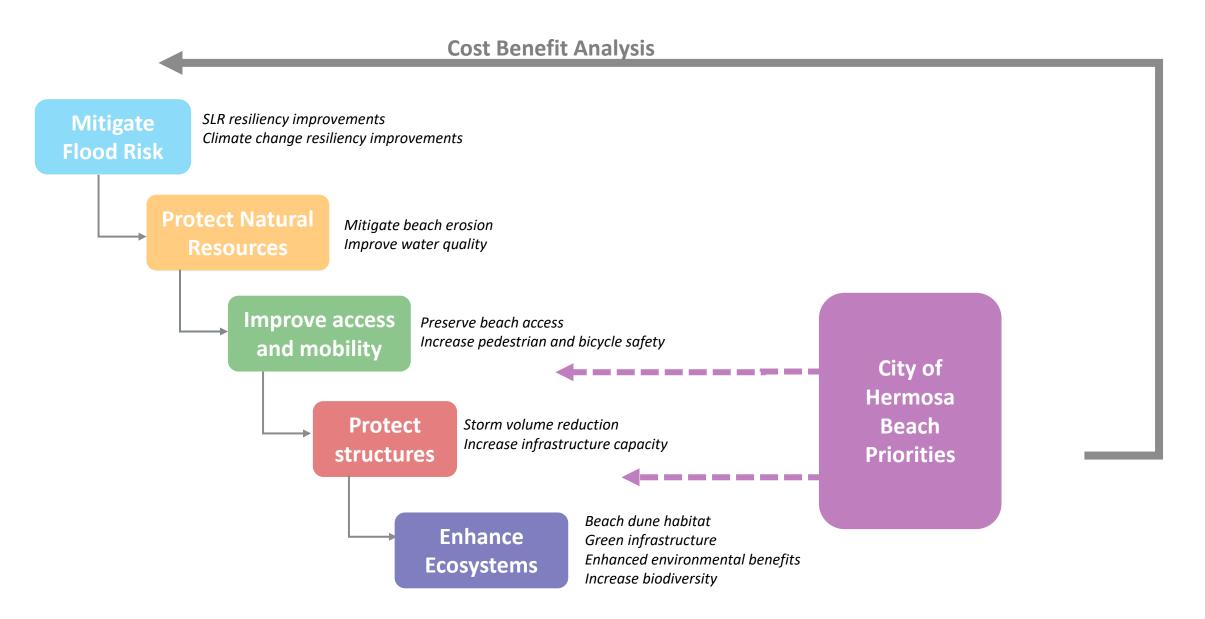
"Solve conflict between pedestrians and bicyclists"

"Nobody, including Bikers, ever slows down"

"You need to present a design that does not reduce traffic lanes"

"Is there city budget for maintenance"

RECOMMEDED DECISION-MAKING FACTORS



Additional considerations

WHAT ARE THE NEXT STEPS?

Cost Benefit Report – January 2022

Funding Source Report – January 2022

Final Report – February 2022



Draft Conceptual Design

HERMOSA BEACH CCARM

Climate Change Adaptation and Resiliency Measures to Address Coastal Flooding

THANK YOU!

January 12, 2022 5-7pm